

Energy-Related Environment Research

AVIAN POWERLINE INTERACTION COMMITTEE

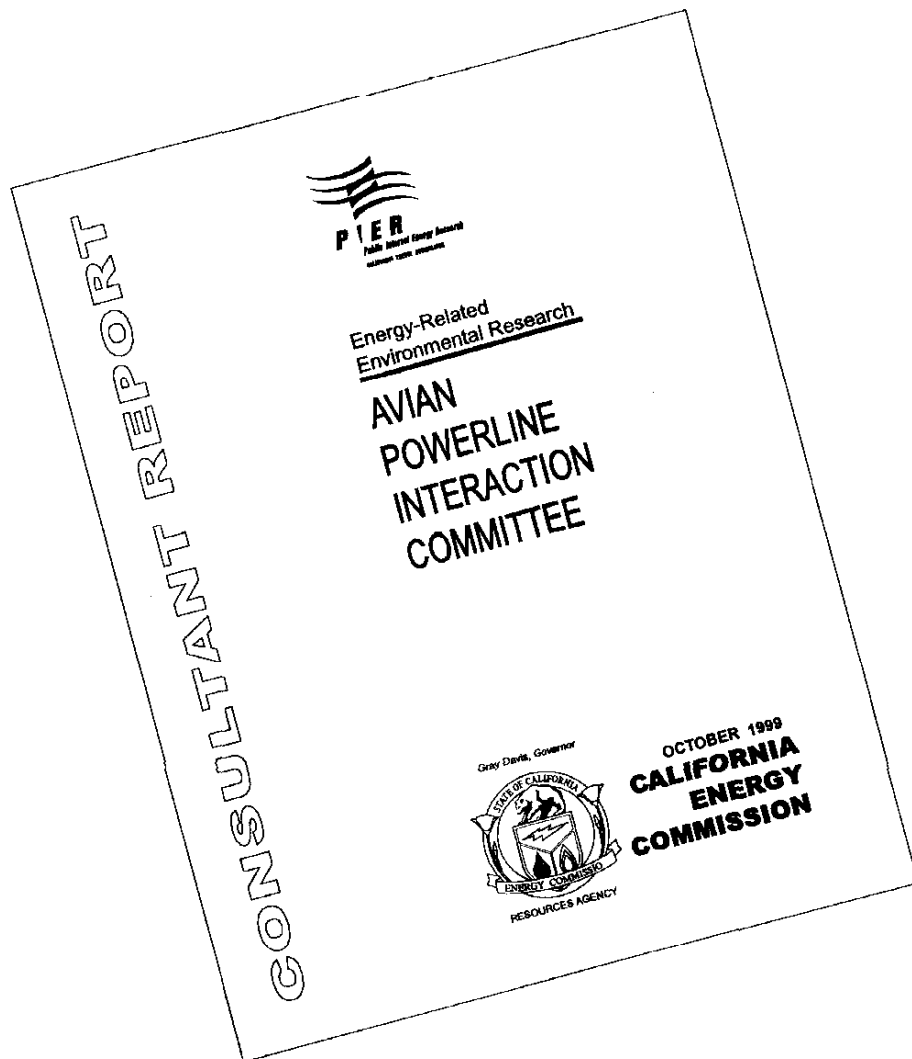
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Table of Contents

Section	Page
PREFACE	IV
EXECUTIVE SUMMARY	2
ABSTRACT	4
1.0 INTRODUCTION	5
1.1 Project Objective	5
2.0 PACIFIC GAS AND ELECTRIC COMPANY PARTICIPATION	6
2.1 Outcomes	6
3.0 CONCLUSIONS AND RECOMMENDATIONS	7
3.1 Conclusions	7
3.2 Recommendations	7
3.3 Summary	7

Preface

The Public Interest Energy Research (PIER) Program supports public interest energy research and development that will help improve the quality of life in California by bringing environmentally safe, affordable, and reliable energy services and products to the marketplace.

The PIER Program, managed by the California Energy Commission (Commission), annually awards up to \$62 million through the Year 2001 to conduct the most promising public interest energy research by partnering with Research, Development, and Demonstration (RD&D) organizations, including individuals, businesses, utilities, and public or private research institutions.

PIER funding efforts are focused on the following six RD&D program areas:

- Buildings End-Use Energy Efficiency
- Industrial/Agricultural/Water End-Use Energy Efficiency
- Renewable Energy
- Environmentally-Preferred Advanced Generation
- Energy-Related Environmental Research
- Strategic Energy Research.

In 1998, the Commission awarded approximately \$17 million to 39 separate transition RD&D projects covering the five PIER subject areas. These projects were selected to preserve the benefits of the most promising ongoing public interest RD&D efforts conducted by investor-owned utilities prior to the onset of electricity restructuring.

What follows is the final report for the Avian Powerline Interaction Committee, one of nine projects conducted by Pacific Gas and Electric Company. This project contributes to the Energy-Related Environmental Research program.

For more information on the PIER Program, please visit the Commission's Web site at: <http://www.energy.ca.gov/research/index.html> or contact the Commission's Publications Unit at 916-654-5200.

Executive Summary

Objective

This project supported Pacific Gas and Electric Company's involvement in the Avian Powerline Interaction Committee (APLIC) for one year.

APLIC is made up of biologists from several utilities and a representative from the U.S. Fish and Wildlife Service. Its purpose is to find ways to prevent bird collisions with powerlines and bird electrocutions on powerlines and other utility structures. The California Energy Commission (Commission) supported Pacific Gas and Electric Company's continued involvement with APLIC, and made it possible for APLIC to host a short course on preventing bird electrocutions and collisions with utility structures at Pacific Gas and Electric Company's Livermore Construction Training Center.

Outcomes

- The Pacific Gas and Electric Company representative attended three APLIC meetings.
- A training course was presented in California dealing with bird protection at utility structures.
- Pacific Gas and Electric Company reviewed APLIC funded videos and publications and provided copies to the Commission.

Conclusions

Despite its restricted membership and limited budget, APLIC is an outstanding example of successful nationwide cooperation among utilities and a regulatory agency to effectively address an environmental problem.

The California Energy Commission (the Commission) funding made Pacific Gas and Electric Company's continued participation possible during this period. In particular, the short course on bird electrocution could not have been given in California without the Commission's support.

Recommendations

We recommend that the Commission continue to support Pacific Gas and Electric Company's involvement with APLIC and support of its activities.

Abstract

This project supported Pacific Gas and Electric Company's involvement in the Avian Powerline Interaction Committee (APLIC) for one year. The purpose of APLIC is to find ways to prevent bird collisions with powerlines and electrocutions on powerlines and other utility structures.

The California Energy Commission (Commision) finding who made it possible for APLIC's short course on preventing bird electrocutions and collisions to be presented in California for the first time.

Despite its restricted membership and limited budget, APLIC is an outstanding example of successful nationwide cooperation among utilities and a regulatory agency to effectively address an environmental problem.

1.0 Introduction

The Avian Powerline Interaction Committee (APLIC) is comprised of biologists from a dozen utilities and a representative from the U.S. Fish and Wildlife Service. Its purpose is address problems of bird collisions with powerlines and electrocutions on powerlines and other utility structures. It was formally established in 1988, following years of informal cooperation among various utilities. The Edison Electric Institute (EEI) supports it as a separately funded activity; EEI provides limited organizational support while membership dues fund the committee's activities.

Pacific Gas and Electric Company was a founding member of APLIC and remains an active participant. Pacific Gas and Electric Company's Research and Development Department funded APLIC involvement until mid-1997. As a consequence of utility deregulation, Pacific Gas and Electric Company dissolved its R&D department. The California Energy Commission's (Commission) Public Interest Energy Research (PIER) program decided to fund Pacific Gas and Electric Company's APLIC involvement for 1998 and 1999.

The U.S. Fish and Wildlife Service recognized APLIC's contributions when it awarded the distinguished Conservation Service Award to APLIC in 1999. Established in 1951, the Conservation Service Award is a Department of the Interior honor granted to a private citizen, group, or organization of private citizens for direct service to conservation. It is considered the highest honor that can be bestowed by the Department. APLIC's chair, Mr. Bill Bolin of Virginia Power, accepted the award presented by President Clinton and Interior Secretary Bruce Babbitt in March of 1999.

1.1 Project Objective

This project supported Pacific Gas and Electric Company's involvement in APLIC for one year and allowed presentation of a short course on preventing bird electrocutions and collisions with utility structures at Pacific Gas and Electric Company's Livermore, California Construction Center.

2.0 Pacific Gas and Electric Company Participation

The Pacific Gas and Electric Company representative attended three APLIC meetings, submitting a trip report on each to the California Energy Commission.

APLIC produced two videos: *Preventing Bird Collisions with Powerlines* and *Suggested Practices for Preventing Raptor Electrocutions on Powerlines*. Pacific Gas and Electric Company provided copies of both videos to the Commission.

In addition, the manuals *Preventing Bird Collisions with Powerlines: the State of the Art in 1994* and *Suggested Practices for Preventing Raptor Electrocutions on Powerlines: the State of the Art in 1996* continued to be in demand and APLIC continued to distribute them.

2.1 Outcomes

This project resulted in the following:

- The Pacific Gas and Electric Company representative attended three APLIC meetings.
- A short course on preventing bird electrocutions and collisions with powerlines and other electric facilities was presented to 35 people from utilities and regulatory agencies at Pacific Gas and Electric Company's Livermore Construction Training Center in May, 1998.
- Pacific Gas and Electric Company reviewed APLIC funded videos and publications and provided copies to the Commission.

3.0 Conclusions and Recommendations

3.1 Conclusions

APLIC is an outstanding example of successful nationwide cooperation among utilities and a regulatory agency to effectively address an environmental problem. This has been accomplished despite its restricted membership and very limited budget.

3.2 Recommendations

By continuing to support Pacific Gas and Electric Company's involvement in APLIC, the Commission would participate in the following activities:

- Support a study, in progress, that aims to determine causes of raptor mortality in the Flathead Valley of Montana
- Develop a poster illustrating raptors and some technical solutions for preventing their electrocutions
- Sponsor a world conference sometime around 2002
- Produce the collision and electrocution manuals on CD-ROM and develop a website
- Develop a priority list of research topics and proposals for work

3.3 Summary

California Energy Commission funding made Pacific Gas and Electric Company's continued participation possible during this period. In particular, the short course on bird electrocution could not have been given in California without the Commission's support.

By participating in APLIC, the Commission supported an environmental group that provides information about the electrocution of birds by electrical distribution systems. Research in this area is important because it improves the reliability of the electrical distribution systems in California, while contributing to the conservation of this important natural resource.